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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,731	11/29/2001	Alangudi Sankaranarayanan	Q66697	3514

7590 08/13/2004

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EXAMINER	
ROBINSON, BINTA M	

ART UNIT	PAPER NUMBER
1625	

DATE MAILED: 08/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/995,731	SANKARANARAYANAN, ALANGUDI	
	Examiner	Art Unit	
	Binta M Robinson	1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,16-29,31-34,36-39,41-44,46-63,65-69,71-75 and 77-90* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16,23-29,31-34, 36-39,41-44,46-63,65-69,83-90* is/are rejected.

7)☒ Claim(s) *17-22,71-75,77-82* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *72004* .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

Claims 1-14, 16-29, 31-34, 36-39, 41-44, 46-63, 65-69, 71-75 and 77-90 are pending.

The 112, first paragraph rejection of claims 1, 2, 4, 5, 7, 8, 10, 11, 16-25, 26, 31, 41, 46-50, 53, 54, 56, 57, 59, 60, 65, 71, 72, 77-90 lack of enablement with regard to R2, R9, R10 not equaling all heterocyclic groups claimed, the 112, first paragraph rejection of claims 48 and 82 and the 112, first paragraph rejection of claims 16 and 24 regarding the term "preventing", the 112, second paragraph rejection of claim 89 is withdrawn in light of applicant's comments on pages 65-66 of the applicant's remarks and amendment dated 4/28/04.

As detailed in the interview summary dated June 6, 2003, the applicant's representative agreed that the elected group I invention to be examined is the composition of formula I wherein X is everything claimed, R2 is are the radicals claimed except heteroaryl, R7 is everything claimed except heteroaryl, R1 is N(R7)N(R7)R9 where R9 is defined at paper no. 9, R3 is thienyl. Applicants traverse the restriction requirement, alleging that the genus defined by the examiner is unreasonably restrictive. The group I invention is drawn to claims 1 -14, 16-29, 31-34, 36-39, 41-44, 46-63, 65-69, 71-75, 77-90.

The above restriction is clarified since no paper no. 9 can be found. The examined Group I invention is as described above except that R9 is everything claimed.

However, the two groups defined in the office action mailed 7/03/02, (Group I, 1 -14, 16-29, 31-34, 36-39, 41-44, 46-63, 65-69, 71-75, 77-90.

and Group II, claims 1-90, drawn to compositions having all of the radicals not claimed in Group I and a method of treating with the compounds not claimed in group I) are directed to compounds which are recognized in the art as being distinct from one another because of their diverse chemical structure, their different chemical properties, modes of action, different effects and reactive conditions (MPEP 806.04, MPEP 808.01). Additionally, the level of skill in the art is not such that one invention would be obvious over the other invention (Group), i.e. they are patentable over each other. Chemical structures, which are similar, are presumed to function similarly, whereas chemical structures that are not similar are not presumed to function similarly. The presumption even for similar chemical structures though is not irrebuttable, but may be overcome by scientific reasoning or evidence showing that the structure of the prior art would not have bee expected to function as the structure of the claimed invention. Note that in accordance with the holding of Application of Papesch, 50 CCPA 1084, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and In re Lalu, 223 USPQ 1257 (Fed. Cir. 1984), chemical structures are patentably distinct where the structures are either not structurally similar, or the prior art fails to suggest a function of a claimed compound would have been expected from a similar structure. The restriction requirement is justified and therefore FINAL.

(new rejections)

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 50-63, 83-86 are rejected under 35 U.S.C. 101 because the claimed invention is not supported by either a credible asserted utility or a well established utility.

A method of inhibiting the formation of AGE as well as a composition for scavenging free radicals in the body cell are not specific, credible, or substantial utilities. To overcome or avoid this rejection, the applicant must disclose a real –world use for the agonist, such as a believable assertion that it would have a pharmaceutical use. Since the fact pattern fails to establish what disease, if any, would be treatable by the compound, the claimed treatment and composition does not encompass a specific, substantial, and credible utility.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 50-63 and 83-86 are also rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. .

Specifically, since the claimed invention is not supported by either a credible asserted utility or a well established utility for the reasons set forth above, one skilled in the art clearly would not know how to use the claimed invention. A method of inhibiting the formation of AGE as well as a composition for scavenging free radicals in the body cell with the claimed compounds is not adequately described in terms of real world uses

such as actual diseases treated. Further, the method and composition requires treatment of diseases that have not been disclosed

Therefore, the fact pattern indicates that the artisan was not in possession of the claimed method of use. In the absence of some understanding of the diseases to be treated and which, in any, agonists could be used treat said disease, the artisan would not have accepted that the applicant was in possession of the claimed method. No in vivo test data confirms that the compounds in inhibiting formation of AGE or scavenging free radicals in the body are able to treat actual diseases claimed in claims 16, 19, 23-29, and 31-39, 41-44, 47.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 16, 19, 23-29, and 31-34, 36-39, 41-44, 50-63, 65-69, 71-75are rejected under 35 U.S.C. 112, first paragraph, because the specification, does not reasonably provide enablement for the method of treating all of the dermatological conditions listed, for the method of delaying the onset of aging and wrinkling of the skin, a method of treating diseases caused by accumulation of free radicals in the body cells of a mammal and pharmaceutical compositions for scavenging free radicals in the body which comprises administering an effective amount of a compound of formula I. The specification does not enable any person skilled in the art to which it pertains, or with

which it is most nearly connected, to use the invention commensurate in scope with these claims.

In *In re Wands*, 8 USPQ2d 1400 (1988), factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have need described. They are:

1. the nature of the invention,
2. the state of the prior art,
3. the predictability or lack thereof in the art,
4. the amount of direction or guidance present,
5. the presence or absence of working examples,
6. the breadth of the claims,
7. the quantity of experimentation needed, and
8. the level of the skill in the art.

The Nature of the Invention

The nature of the invention is a new class of compounds particularly pyridinium derivatives which have been found to exhibit triple function of a free radical scavenger (antioxidant), AGE breaker and AGE inhibitor, and cosmetic composition.

The State of the prior art

There is a considerable body of evidence implicating the formation and accumulation of advanced glycation end products as a major factor in the development of diabetic complications, atherosclerosis, Alzheimer's disease, renal failure, and vascular complications, retinopathy, and neuropathy and the normal aging process. (See Rahbar, page 75). An AGE –inhibitor is usually defined as a substance which inhibits the covalent crosslinking of proteins and peptides by sugars or sugar derived oxidation products. (Munch et. al.) The importance of transition metal chelators as a therapeutic strategy for diseases like diabetes and Alzheimer's disease has already been initiated in vivo with promising results. AGE inhibitor compounds with high

chelation activities and carbonyl scavenger properties are thought to be promising candidate therapeutic agents against various diseases associated with oxidative and carbonyl stress.

Clinical studies evaluating the efficacy of AGE inhibitor, aminoquanidine in diabetic patients have been started in the US and in Canada. Beneficial therapeutic effects of aminoguanidine were observed however, it is unclear if these effects are due to inhibition of AGE formation. (See Bierhaus et. al.) Tenilsetam however, was shown to be an effective AGE inhibitor, although its mechanism is not yet fully understood. (Munch et. al., page 134). Tenilsetam has been shown to have some efficacy in alzheimer's patients, however a direct attenuation of cytotoxic AGE effects by AGE-inhibitors has to be shown at least before proposing AGE inhibitors as a valid approach for the treatment of Alzheimer's disease patients. According to Munch et. al, it seems quite speculative and premature to propose a specific treatment of alzheimer's disease with AGE-inhibitors as long as an animal model by AGE-inhibitors has not been shown.

The efficacy of AGE inhibitors in treating skin cosmetically, in treating nephrological disorders, dermatological disorders, non-enzymatic browning of oral cavity, growth impairment, endothelial or other organ dysfunction, immunological disorders, restenosis, or erectile dysnfunction or diseases casued by free radical damage has not been established in the art.

The predictability or lack thereof in the art

The instant claimed invention is highly unpredictable as discussed below:

It is noted that the pharmaceutical art is unpredictable, requiring each embodiment to be individually assessed for physiological activity. In re Fisher, 427 F.2d 833, 166 USPQ 18 (CCPA 1970) indicates that the more unpredictable an area is, the more specific enablement is necessary in order to satisfy the statute. In the instant case, the instant claimed invention is highly unpredictable since one skilled in the art would recognize that in regards to therapeutic effects of AGE-mediated diseases, whether the AGE was inhibited or not would affect the possible treatment of any disease.

Hence, in the absence of a showing of correlation between all the diseases claimed as capable of treatment by the compound and the inhibition of AGE, one of skill in the art is unable to fully predict possible results from the administration of the compound of claim 1 due to the unpredictability of the role of AGE, i.e. whether promotion or inhibition would be beneficial for the treatment of the diseases.

The nature of pharmaceutical arts is that it involves screening *in vitro* and *in vivo* to determine which compounds exhibit the desired pharmacological activities. There is no absolute predictability even in view of the seemingly high level of skill in the art. The existence of these obstacles establishes that the contemporary knowledge in the art would prevent one of ordinary skill in the art from accepting any therapeutic regimen on its face.

The amount of direction or guidance present

The direction present in the instant specification is that the compounds of claim 1 can inhibit the production of AGE or be an AGE breaker which helps in the treatment of

all of the conditions and diseases claimed in claims 16, 19, 23-29, and 31-39, 41-44, 47. However, the specification is silent and fails to provide guidance as to whether the diseases listed as AGE-mediated diseases, require the inhibition of AGE for treatment, i.e. the specification fails to provide a correlation between the diseases listed and the inhibition of AGE. The efficacy of AGE inhibitors in the treatment of dermatological diseases, diseases caused by accumulation of free radicals, nephrological disorders, dermatological disorders, non-enzymatic browning of oral cavity, growth impairment, endothelial or other organ dysfunction, immunological disorders, restenosis, or erectile dysnfunction, vascular complications, alzheimer's disease, or diabetes has not been established.

The presence or absence of working examples

The only presence of a working example are the examples on pages 27-37 and the only in vivo examples are of the compounds AGE activity on diabetes and the aging process. There are not other working examples for any other diseases listed in the specification. Also, the compounds which are disclosed in the specification have no pharmacological data regarding the treatment of any other disease besides the aging and diabetes and have no data on the possible treatment of AGE-mediated diseases that require the inhibition or breaking of AGE. Also, the specification fails to provide working examples as to how the listed diseases can be treated by the inhibition or breaking of AGE, i.e. again, there is no correlation between the diseases listed and inhibition or breaking of AGE.

The breadth of the claims

The breadth of the claims is that the compound of claim 1 can treat any AGE-mediated disease, without regards as to the affect of AGE on the stated diseases.

The quantity of experimentation needed

The quantity of experimentation needed is undue experimentation. One of skill in the art would need to determine what listed diseases would be benefited by the inhibition or breaking of AGE and would furthermore then have to determine whether the claimed compounds would provide treatment of the disease by the inhibiton or breaking of AGE.

The level of the skill in the art

The level of skill in the art is high. However, due to the unpredictability in the pharmaceutical art, it is noted that each embodiment of the invention is required to be individually assessed for physiological activity by in vitro and in vivo screening to determine which compounds exhibit the desired pharmacological activity and which diseases would benefit from this activity.

Thus, the specification fails to provide sufficient support of the broad use of the compound of the claim 1 for the treatment of an AGE-mediated disease. As a result necessitating one of skill to perform an exhaustive search for which AGE-mediated diseases can be treated by the compound of claim 1 in order to practice the claimed invention.

Genentech Inc. v. Novo Nordisk A/S (CA FC) 42 USPQ2d 1001 , states that " a patent is not a hunting license. It is not a reward for search , but compensation for its

successful conclusion" and "[p]atent protection is granted in return for an enabling disclosure of an invention, not for vague intimations of general ideas that may or may not be workable".

Therefore, in view of the Wands factors and In re Fisher (CCPA 1970) discussed above, to practice the claimed invention herein, a person of skill in the art would have to engage in undue experimentation to test which AGE-mediated diseases can be treated by the compound encompassed in the instant claims, with no assurance of success.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 47 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. Claim 47 is indefinite because it is a composition claim that is improperly dependent on a method of use claim. To overcome this rejection, it is suggested that claim 47 be amended to depend from claim 1.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14, 16, 46, 47, 48, 49, 50-63, 87-90 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16, 18-23 of U.S. Patent No. 6624178. Although the conflicting claims are not identical, they are not patentably distinct from each other because the US Patent teaches a subgenus of the instant genus of compounds and compositions claimed as well as a method of preventing diseases caused by diabetes and aging related copmlications.

U.S. Patent No. 6624178 teaches the instant compound as shown in Formula I, composition containing the compound where R1 is –R4-R5, , R4 is –N(R7)R6N(R7), wherein R6 is alkyl having 2 to 8 carbon atoms; R5 is selected from the group consisting of alkyl, where R7 is selected from the grop consisting of H, alkyl, and aryl containing up to two conjugated or fused ring systems including heteroaryl, R2 is selected from the group consisting of F, Cl, Br, I, OR7, NO2, alkyl, aryl, formyl, acyl, C(O)NR7R10, C(O)O7, NR7R10, N=C(R7)IR10), N(R7)N(R7)(R10), and CH(R7)C(O)R8 where R8 is selected from the group consisting of R7, OR7 and NR7R10 where R10 is selected from the group consisting of H, alkyl and aryl, X is selected from the group consisting of a halide ion, acetate ion, perchlorate ion, sulfonate ion, oxalate ion, citrate ion, tosylate ion, maleate ion, mesylate ion, carbonate ion, sulfite ion, phosphoric hydrogen ion, phosphaonate ion, phosphate ion, BF4- and PF6-; with proviso that I) when two alkyl groups are present on the same carbon or nitrogen, they

are optionally linked together to form a cyclic structure and ii) the nitrogen of heteroaryl ring of R10, when present, is optionally quarternized and a method preventing or treating diseases caused by diabetes and aging related complications. At columns 15-18, see the compound of formula I, the composition containing the said compound, and the method of treating diseases caused by diabetes and aging related complications. The difference between the prior art compound and the instantly claimed compounds is the teaching of a generic compound versus a disclosed species. It would have been obvious to one of ordinary skill in the art to select various known radicals within a genus to prepare structurally similar compounds. For instance, see the compound, N, N'-bis [3-carbonyl-1-(2-thien-2'yl-2-oxoethyl)-3-pyridinium]hydrazine dibromide, where a disclosed species is exemplified. Accordingly, the compounds are deemed unpatentable therefrom in the absence of a showing of unexpected results for the claimed compounds over those of the generic prior art compounds.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14, 16, 46, 47, 48, 49, 50-63, 87-90 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9, 11, 12 of U.S. Patent No. 6462057. Although the conflicting claims are not identical, they are not patentably distinct from each other because the US Patent teaches a subgenus of the instant genus of compounds and compositions claimed as well as a method of preventing diseases caused by diabetes and aging related copmlications.

U.S. Patent No. 6462057 teaches the instant compound as shown in Formula I, composition containing the compound where R1 is –N(R7)N(R7)R9, where R7 is selected from the group consisting of H, alkyl and aryl containing up to two conjugated or fused ring systems including heteroaryl provided R7 might be different R1 and R3 in the same compound; R2 is selected from the group consisting of F, Cl, Br, I, OR7, NO2, alkyl, aryl containing up to two conjugated or fused ring systems including heteroaryl, formyl, acyl, C(O)NR7R10, C(O)OR7, NR7R10, N=C(R7)(R10), SR7, SO2NH2, SO2 alkyl and SO2 aryl; m is 0 , 1 or 2; R3 is selected from the group consisting of R7, O-alkyl, O-aryl, N(R7)(10), N=C(R7)(R10), N(R7)N(R7)(R10), N(R7)N=C(R7)(R10) and CH(R7)C(O)R8 where R8 is selected from the group consisting of R7, OR7 and NR7R10, R9 is selected from the group consisting of hydrogen, alkyl, aryl containing up to two conjugated or fused ring systems including heteroaryl, C(O)R10, -SO2R10, C(S)NHR10, CNH)NH(R10) and C(O)NHR10, R10 is selected from the group consisting of H, alkyl and aryl containing up to two conjugated or fused ring systems including heteroaryl in each case may be the same or different from substitutent R7, provided

R10 may be the same or different for R1 and R3 in the same compound; X is selected from the group consisting of a halide ion, acetate ion, perchlorate ion, sulfonate ion, oxalate ion, citrate ion, tosylate ion, maleateion, mesylate ion, carbonate ion, sulfite ion, phosphoric hydrogen ion, phosphonate ion, phosphate ion, BF4- and PF6-; with proviso that I) when two alkyl groups are present on the same carbon or nitrogen, they may be linked together to carbon or nitrogen, they may be linked together to form a cyclic structure ii) the nitrogen of heteroaryling of R10, when present may be quarternized . At columns 17-18, see the compound of formula I, the composition containing the said compound, and the method of treating diseases caused by diabetes and aging related complications. The difference between the prior art compound and the instantly claimed compounds is the teaching of a generic compound versus a disclosed species. It would have been obvious to one of ordinary skill in the art to select various known radicals within a genus to prepare structurally similar compounds. For instance, see the compound, 1-(2-thien-2-yl-2-oxoethyl)-3-(methanesulfonylhydrazinocarbonyl)pyridinium bromide, where a disclosed species is exemplified. Accordingly, the compounds are deemed unpatentable therefrom in the absence of a showing of unexpected results for the claimed compounds over those of the generic prior art compounds.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-14, 16, 46, 47, 48, 49, 50-63, 87-90 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16, 18-23 of U.S. Patent No. 6608094. Although the conflicting claims are not identical, they are not patentably distinct from each other because the US Patent teaches a subgenus of the instant genus of compounds and compositions claimed as well as a method of preventing diseases caused by diabetes and aging related copmlications.

U.S. Patent No. 6608094 teaches the instant compound as shown in Formula I, composition containing the compound where Y is –C(O)R1; R1 is –N(R7)N(R7)R9, wherein R7 is seleted from the group consisting of H, alkyl, and aryl containing up to two conjugated or fused ring systems including heteraryl, provided R7 may be the same or different for R1 and R3 in the same compound, R2 is selected from the group consisting of F, Cl, Br, I, OR7, NO2, alkyl, aryl containing up to two conjuagated or fused ring systems including heteroaryl, formyl, acyl, C(O)NR7R10, C(O)OR7, NR7R10, SR7, SO2NH2, SO2alkyl and SO2aryl; m is 0, 1, or 2, R is –CH2-C(O)R3; R3 is selected from the group consisting of R7, -O-alkyl, N(R7)(R10), N(R7)N(R7)(R10),, and CH(R7)C(O)R8 where R8 is selected from the grop consiting of R7, OR7 and NR7R10, R9 is selected from the group consisting of hydrogen, alkyl, aryl containing up to two conjugated or fused ring systems including heteroaryl, -C(O)R10, -XO2R10, -

C(S)NHR10, -C(NH)NH(R10 and –C(O)NHR10; R10 is selected from the group consisting of H, alkyl and aryl containing up to two conjugated or fused ring systems including heteraryl and in each case may be the same or different from substituent R7 provided R10 may be the same or different for R1 and R3 in the same compound; X is selected from group consisting of a halide ion, acetate ion, perchlorate ion, sulfonate ion, oxalate ion, citrate ion, tosylate ion, maleate ion, mesylate ion, carbonate ion, sulfite ion, phosphoric hydrogen ion, phosphonate ion, phosphate ion, BF4- and PF6-' with proviso that I) when two alkyl groups are present on the same carbon or nitrogen, they may be linked together to form a cyclic structure; and ii) the nitrogen or heteroaryl ring of R10, when present, may be quarternized with a compound X-CH2-C(O)R3, where X and R3 have the meaning as given above. At columns 37-38, see the compound of formula I, the composition containing the said compound, and the method of treating diseases caused by diabetes and aging related complications. The difference between the prior art compound and the instantly claimed compounds is the teaching of a generic compound versus a disclosed species. It would have been obvious to one of ordinary skill in the art to select various known radicals within a genus to prepare structurally similar compounds. For instance, see the compound, Pyridinium, 3,3'-(hydrazodicarbonyl)bis[1-[2-(2-furanyl)-2-oxoethyl]-, dibromide, where a disclosed species is exemplified. Accordingly, the compounds are deemed unpatentable therefrom in the absence of a showing of unexpected results for the claimed compounds over those of the generic prior art compounds.

Claims 17-22,71-75, 77-81 are objected to because they contain non-elected subject matter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binta M. Robinson whose telephone number is (571) 272-0692. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562.

A facsimile center has been established. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier numbers for accessing the facsimile machine are (703)308-4242, (703)305-3592, and (703)305-3014.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)-272-1600.

BMR
August 10, 2004

Cecilia J. Tsang
Supervisory Patent Examiner
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